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ACQUISITION OF THE ARMORED MEDICAL  
EVACUATION VEHICLE

Report No. D-2001-012

November 22, 2000

Office of the Inspector General  
Department of Defense

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### **Acronyms**

AMEV	Armored Medical Evacuation Vehicle
BFVS	Bradley Fighting Vehicle Systems
IOT&E	Initial Operational Test and Evaluation
RD&E	Research, Development, Test, and Evaluation



INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
400 ARMY NAVY DRIVE  
ARLINGTON, VIRGINIA 22202-2885

November 22, 2000

MEMORANDUM FOR AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Audit Report on the Acquisition of the Armored Medical Evacuation  
Vehicle (Report No. D-2001-012)

We are providing this report for review and comment. This report discusses the readiness of the Armored Medical Evacuation Vehicle to enter full-rate production.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. The Army Medical Research and Materiel Command comments were unresponsive to the recommendation. Therefore, we are redirecting the recommendation to the Assistant Secretary of the Army (Financial Management and Comptroller) and request that the Assistant Secretary provide comments on the recommendation by January 22, 2001.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Mr. John E. Meling at (703) 604-9091 (DSN 664-9091) (jmeling@dodig.osd.mil) or Mr. Jack D. Snider at (703) 604-9087 (DSN 664-9087) (jsnider@dodig.osd.mil). See Appendix D for the report distribution. The audit team members are listed inside the back cover.

*David K. Steensma*

David K. Steensma  
Deputy Assistant Inspector General  
for Auditing

## Office of the Inspector General, DoD

Report No. D-2001-012

November 22, 2000

(Project No. D2000AE-0208)

### Acquisition of the Armored Medical Evacuation Vehicle

#### Executive Summary

**Introduction.** The Armored Medical Evacuation Vehicle (AMEV), an Army Acquisition Category III program, is a Bradley Fighting Vehicle variant and is intended to replace the M113A2/A3 Armored Ambulance as the medical evacuation vehicle platform in the Army's heavy divisions. The AMEV is an armored, tracked vehicle designed to carry four-litter and four ambulatory patients or any combination thereof. The platform for the AMEV is an upgraded M2A0 Bradley Fighting Vehicle variant, which has the turret removed, the roof squared off and raised 13 inches, a 600 horsepower engine, and additional armor. The Army Medical Research and Materiel Command and the Program Executive Office, Ground Combat and Support Systems, have overall management responsibility for the AMEV. The Army plans to make a low-rate initial production decision in September 2001 for the AMEV and a full-rate production decision in August 2003. The Army has a requirement to procure 675 vehicles at an estimated program cost of \$580 million; however, the AMEV is currently unfunded for procurement. The Army projects the life-cycle cost for the AMEV through FY 2027 to be about \$2.5 billion in FY 1999 dollars.

**Objectives.** The primary audit objective was to evaluate the overall management of the AMEV. Because the AMEV was in the engineering and manufacturing development phase, we evaluated whether management was cost effective in readying the system for the production phase of the acquisition process. We also evaluated the management control program as it related to the audit objectives.

**Results.** The Army did not have a viable acquisition strategy to acquire the AMEV at the completion of the engineering and manufacturing development phase of the acquisition process. As a result, the Army had obligated about \$9.7 million in research, development, test and evaluation funds for the program from its inception in FY 1997 through FY 2000 and planned to obligate another \$6.3 million to complete the developmental effort in FY 2001 through FY 2003 for a program that the Army did not intend to fund for production. Implementing the recommendation would allow the Army to put the \$6.3 million of remaining funds programmed for the AMEV to better use. See the Finding section for a discussion of the audit results.

The management controls that we reviewed were effective in that no material management control weakness was identified.

**Summary of Recommendation.** We recommend that the Assistant Secretary of the Army (Financial Management and Comptroller) discontinue further research, development, test and evaluation funding for the AMEV.

**Management Comments.** Because the AMEV is co-managed, we requested that the Commander, Army Medical Research and Materiel Command, and the Program Executive Officer, Ground Combat and Support Systems, comment on the draft report. Consequently, we received comments from the Program Executive Officer, Ground

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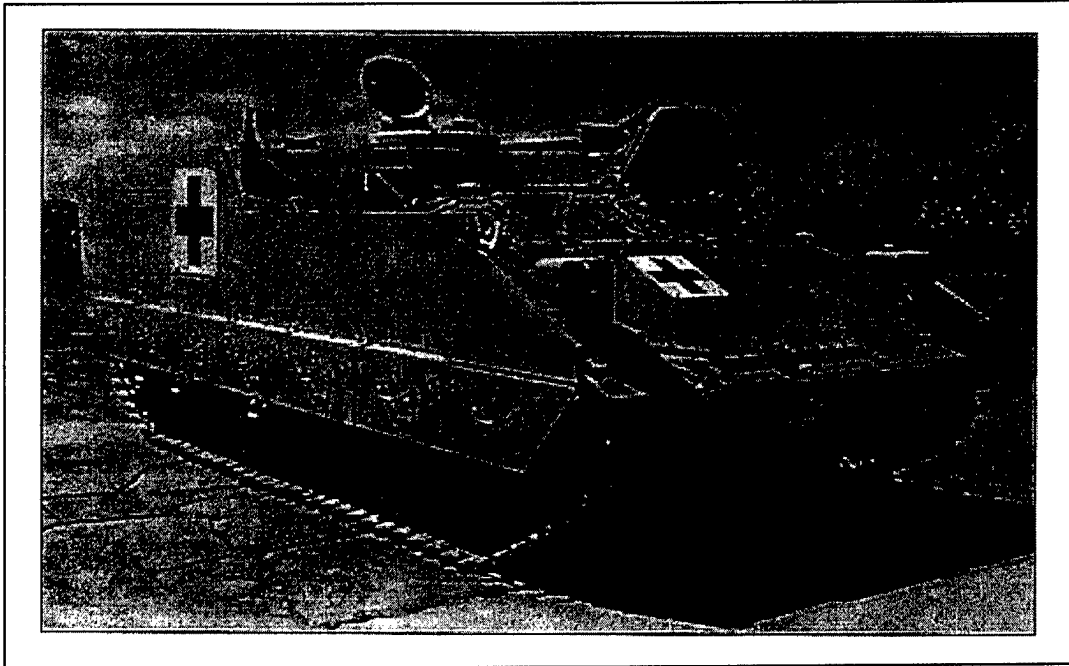
Combat and Support Systems, and the Acting Commander, Army Medical Materiel Development Activity, who responded for the Commander, Army Medical Research and Materiel Command. The Program Executive Officer stated that the draft report provides an accurate assessment of the documentation that the Project Manager, Bradley Fighting Vehicle Systems, provided during the audit. The Acting Commander did not concur with the finding and did not specifically address the recommendation to discontinue further funding for the AMEV; however, he stated that efforts to obtain Army funding for the AMEV were ongoing. The Acting Commander also provided comments and recommended changes to selected statements in the report. A discussion of the management comments is in the Finding section of the report, and the complete text is in the Management Comments section.

**Audit Response.** Because the Acting Commander, Army Medical Materiel Development Activity, did not address the recommendation and was continuing unrealistic efforts to obtain funding for the AMEV, we are redirecting the recommendation to the Assistant Secretary of the Army (Financial Management and Comptroller) to ensure that the Army spends funds on efforts that it is committed to fully funding and procuring. Therefore, we request that the Assistant Secretary comment on the recommendation by January 22, 2001.

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Armored Medical Evacuation Vehicle

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## Background

The Armored Medical Evacuation Vehicle (AMEV), an Army Acquisition Category III program, is a Bradley Fighting Vehicle variant and is intended to replace the M113A2/A3 Armored Ambulance as the medical evacuation vehicle platform in the Army's heavy divisions. The AMEV is an armored, tracked vehicle designed to carry four-litter and four ambulatory patients or any combination thereof. The platform for the AMEV is an M2A0 Bradley Fighting Vehicle variant with the turret removed, the roof squared off and raised 13 inches, and upgraded to the M2A2 Bradley Fighting Vehicle variant by adding additional armor and by increasing the engine's performance to 600 horsepower. United Defense Limited Partnership is the prime contractor for the AMEV. Appendix B provides definitions of technical terms used in this report.

The AMEV is designed to overcome M113A2/A3 shortfalls identified during Operation Desert Storm and will have the mobility, survivability, and maintainability equivalent to the force that it supports. M113A2/A3 shortfalls include inadequate casualty evacuation capability due to a lack of space for medical equipment; poor ride stabilization; no environmental control or nuclear, biological, chemical protection; and inadequate self-protection. Medical capability for the AMEV includes on-board oxygen and suction equipment and storage for essential medical items. The "United States Army Armored Systems Modernization Report," February 1999, indicates that the Army intends to replace 675 M113A2/A3 vehicles with the AMEV.

The Army Medical Research and Materiel Command and the Program Executive Office, Ground Combat and Support Systems, co-manage the AMEV with support from subordinate organizations: the Army Medical Materiel Development Activity and the Project Manager, Bradley Fighting Vehicle Systems (BFVS). The BFVS Project Manager is the lead materiel developer for the AMEV with overall management and integration responsibility. The Army Medical Materiel Development Activity is the materiel developer for the medical mission equipment set and also budgets and provides research, development, test and evaluation (RDT&E) funding to the BFVS Project Office. The BFVS Project Manager works with the Army Medical Materiel Development Activity to integrate the medical mission equipment into the AMEV.

The Commander, Army Medical Research and Materiel Command, is the milestone decision authority for the AMEV, except for the low-rate initial production and the full-rate production decisions. The Program Executive Officer, Ground Combat and Support Systems, is the milestone decision authority for the low-rate initial production and the full-rate production decisions and is responsible for budgeting the procurement funding for the AMEV. The Army plans to make a low-rate initial production decision in September 2001 and a full-rate production decision in August 2003. The Army projects the life-cycle cost for the AMEV through FY 2027 to be about \$2.5 billion in FY 1999 dollars.



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## Objectives

The primary audit objective was to evaluate the overall management of the AMEV. Because the AMEV was in the engineering and manufacturing development phase, we evaluated whether management was cost effective in readying the system for the production phase of the acquisition process. We also evaluated the management control program as it related to the audit objectives. See Appendix A for a discussion of the audit scope and methodology, the review of the management control program, and prior coverage related to the audit objectives.

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## Continued Development Without Procurement Funds

The Army did not have a viable acquisition strategy to acquire the AMEV at the completion of the engineering and manufacturing development phase of the acquisition process. This condition occurred because the milestone decision authority allowed the AMEV to enter engineering and manufacturing development without full funding for the production phase of the acquisition process. As a result, the Army had obligated about \$9.7 million in research, development, test and evaluation funds for the program from its inception in FY 1997 through FY 2000 and planned to obligate another \$6.3 million to complete the developmental effort in FY 2001 through FY 2003 for a program that the Army did not intend to fund for production.

### Full-Funding and Acquisition Strategy Policy

**Full-Funding Policy.** DoD Regulation 5000.2-R, "Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs," Change 4, May 11, 1999;<sup>1</sup> Army Regulation 70 -1, "Research, Development, and Acquisition, Army Acquisition Policy," January 15, 1998; and Army Pamphlet 70-3, "Research, Development, and Acquisition -- Army Acquisition Procedures," July 15, 1999, define requirements for full funding of acquisition programs at program initiation.

**DoD Regulation.** DoD Regulation 5000.2-R requires the milestone decision authority to assess affordability at each milestone decision point beginning with program initiation. Further, the Regulation requires that the milestone decision authority not approve an acquisition program to proceed beyond program initiation unless sufficient resources, including manpower, are programmed in the most recently approved Future Years Defense Program, or will be programmed in the next Program Objectives Memorandum, Budget Estimate Submission, or President's Budget.

**Army Regulation.** Army Regulation 70-1 requires the Army to follow guidance and procedures contained in DoD Regulation 5000.2-R for Acquisition Categories II through IV programs.

**Army Pamphlet.** Army Pamphlet 70-3 supplements DoD Regulation 5000.2-R and requires that full funding, which is the total cost for developing, procuring, and sustaining an acquisition program, be shown in the most recent Future Years Defense Program for all programs, regardless of Acquisition Category.

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<sup>1</sup>DoD initially issued DoD Regulation 5000.2-R on March 15, 1996, which included the full-funding guidance and acquisition strategy guidance, discussed later.

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**Acquisition Strategy Policy.** DoD Regulation 5000.2-R requires the program manager to develop and document an acquisition strategy that will serve as the roadmap for program execution from program initiation through post-production support and includes the critical events that govern the management of the program. The primary goal of the acquisition strategy is to minimize the time and cost of satisfying an identified, validated need consistent with common sense and sound business practices.

## **Engineering and Manufacturing Development Phase Continues Without Procurement Funds**

The Army did not have a viable acquisition strategy to acquire the AMEV at the completion of the engineering and manufacturing development phase of the acquisition process. This condition occurred because the milestone decision authority allowed the AMEV to enter engineering and manufacturing development without full funding for the production phase of the acquisition process.

**Acquisition Strategy.** The "Acquisition Strategy Report for the Armored Medical Evacuation Vehicle (AMEV)," May 11, 1999, provides a detailed plan for the acquisition of the AMEV. The Acquisition Strategy covers the need, the delivery requirements, the cost estimate, the test plan, the acquisition approach, the logistic considerations, and the contracting for the program. The acquisition strategy breaks the AMEV into four phases: modifying the prototype vehicle, designing and building the engineering and manufacturing development vehicle, producing 52 low-rate initial production vehicles, and manufacturing 623 full-rate production vehicles. On May 11, 1999, officials of the Army Medical Research and Materiel Command and the Program Executive Office, Ground Combat and Support Systems, approved the acquisition strategy, which stated that low-rate initial production and full-rate production phases were pending funding support.

**Milestone Decision.** The Commander, Army Medical Research and Materiel Command, was the milestone decision authority for the combined AMEV program definition and risk reduction, and engineering and manufacturing development decision review. On May 11, 1999, the Commander chaired the decision review that the Deputy, Program Executive Officer, Ground Combat and Support Systems, and representatives from the Army Medical Materiel Development Activity, Army Medical Department Center and School (the user representative), and the BFVS Project Office attended. The representatives briefed the milestone decision authority that the AMEV had no procurement funding. Although the milestone decision authority expressed reservations about the lack of procurement funding for the AMEV, he approved the AMEV entry into the engineering and manufacturing development phase and directed the AMEV Integrated Product Team<sup>2</sup> to brief him by July 1, 1999, on a strategy to obtain procurement funds in the FYs 2002 through 2007 Program Objectives Memorandum cycle.

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<sup>2</sup>The AMEV Integrated Product Team included representatives from the Army Medical Materiel Development Activity, Army Medical Department Center and School, and the BFVS Project Office.

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**Full-Funding Strategy.** On August 2, 1999, the AMEV Integrated Product Team briefed the milestone decision authority on the funding strategy. At the briefing, the milestone decision authority authorized the Integrated Product Team to continue with the funding strategy to identify potential sources of procurement funds for the AMEV. These potential sources included:

- reprogramming funds currently programmed for upgrading the Army's M113A2 Armored Personnel Carrier to the M113A3 configuration,
- reprogramming Army Medical Department procurement funds for the AMEV, and
- using the proceeds from the sale of the turrets removed from the Bradley M2A0 vehicles in the remanufacture of the M2A0 vehicles to supplement funding for the AMEV if the program received procurement funding.

As part of the funding strategy, the Program Executive Office, Ground Combat and Support Systems, was to submit the AMEV as an unfunded requirement in the FYs 2002 through 2007 Program Objectives Memorandum and to have the Integrated Product Team solicit senior military and civilian leadership support for the AMEV within the Office of the Secretary of Defense and the Military Departments to obtain funding for the AMEV. Previous Program Objectives Memorandum cycles did not include requests for AMEV procurement funds because the Army Medical Materiel Development Activity, a subordinate organization of the Army Medical Research and Materiel Command and the Program Executive Office, Ground Combat and Support Systems, attempted to obtain procurement funding for the Army Armored Medical Treatment Vehicle and did not want the AMEV request to compete with the Armored Medical Treatment Vehicle request in the same Program Objectives Memorandum cycles.

In September 1999, the Program Executive Office, Ground Combat and Support Systems, submitted an unfunded requirement for procurement funding of \$580 million for 675 AMEVs to the Army's Deputy Chief of Staff for Operations and Plans. In March 2000, the Office of the Deputy Chief of Staff for Operations and Plans recorded the unfunded requirement in the FYs 2002 through 2007 Program Objectives Memorandum, assigned the program the lowest priority in its funding prioritization system, and indicated no intention of funding the AMEV. Consequently, the AMEV Integrated Product Team's efforts to obtain funding for the AMEV were unsuccessful.

## **Effect of Continuing the Armored Medical Evacuation Vehicle Program Without Procurement Funds**

Without a viable acquisition strategy for the AMEV, the Army had obligated about \$9.7 million in research, development, test and evaluation funds for the program from its inception in FY 1997 through FY 2000 and planned to

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obligate another \$6.3 million to complete the development effort in FYs 2001 through 2003 for a program that the Army does not intend to fund for production.

**Efforts Planned to Complete Development.** The Army Medical Materiel Development Activity and the BFVS Project Manager plan to spend the \$6.3 million to correct design deficiencies in the engineering and manufacturing development prototype and to complete a number of remaining tasks.

**Design Deficiencies.** In May 2000, the prime contractor delivered the engineering and manufacturing development prototype to the Army for the limited user test, planned for June 2000. However, the Army Medical Department Board conducted an operational test readiness review and determined that the vehicle was not ready for the limited user test. As a result, the Army Medical Department Board conducted a Force Development Experiment in June 2000 to determine what system design changes would be needed to meet operational needs. The results of the experiment identified problems in three areas: stowage, air conditioner reliability, and top-litter patient loading. The Army Medical Materiel Development Activity stated that the Army has identified solutions for the deficiencies noted during the experiment and has begun to incorporate those solutions into the AMEV technical data package. BFVS Project Office officials stated that adequate RDT&E funds exist for the Army and the contractor to correct the deficiencies.

**Remaining Tasks.** The Army Medical Materiel Development Activity and the BFVS Project Office plan to complete a logistics demonstration, operator and maintenance manuals, and a series of tests including a limited user test, a production qualification test, a production verification test, and an initial operational test and evaluation (IOT&E) if the previous test results do not provide sufficient favorable data to demonstrate that the AMEV meets medical operational requirements. The Army Medical Materiel Development Activity plans to fund these tests with the remaining RDT&E funds; however, it does not have enough funds to perform the IOT&E. On August 2, 1999, the AMEV Integrated Product Team briefed the milestone decision authority that an IOT&E, if required, would cost about \$1 million. However, according to the Army Medical Materiel Development Activity, the Army did not validate this estimate. Further, the Army plans to conduct the above series of tests from FY 2001 through early FY 2003; the IOT&E, if necessary, from March through May 2003; and a full-rate production decision review in August 2003.

**Funds Put to Better Use.** By discontinuing the development of the AMEV, the Army could put the remaining \$6.3 million of RDT&E funds to better use.<sup>3</sup> Without an Army commitment to fully fund the AMEV for procurement, the Army will continue to use the M113A2/A3 armored ambulance in the Army heavy divisions. Accordingly, the Army is unnecessarily planning to obligate another \$6.3 million in RDT&E funds for a system that will not enter

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<sup>3</sup>The Army Medical Materiel Development Activity planned a total of \$6.311 million of research, development, test, and evaluation funding for the AMEV Program in FYs 2001 through 2003. The planned funding includes \$1.944 million in FY 2001, \$2.716 million in FY 2002, and \$1.651 million in FY 2003.

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production. Under these circumstances, the prudent course of action would dictate that Army management discontinue the AMEV development effort and put unobligated funds to better use.

## **Management Comments on the Finding and Audit Responses**

Summaries of management comments on the finding and our responses are in Appendix C.

## **Recommendation, Management Comments, and Audit Response**

**Redirected Recommendation.** In the draft report, we directed the recommendation to the Commander, Army Medical Research and Materiel Command. Because the Acting Commander, Army Medical Materiel Development Activity, who responded for the Commander, Army Medical Research and Materiel Command, did not address the recommendation and was continuing unrealistic efforts to obtain funding for the AMEV, we are redirecting the recommendation to the Assistant Secretary of the Army (Financial Management and Comptroller) to ensure that the Army spends funds on efforts that it has committed to fully fund and procure.

**We recommend that the Assistant Secretary of the Army (Financial Management and Comptroller) discontinue further research, development, test and evaluation funding for the AMEV.**

**Management Comments.** The Acting Commander, Army Medical Materiel Development Activity, did not specifically address the recommendation. However, in his overall comments to the report, he stated that efforts were ongoing to obtain Army funding for the AMEV. He also stated that the Army Medical Materiel Development Activity was reconsidering AMEV affordability in response to the changing scope and mission of projected future operations and was conducting a cost analysis of current and future AMEV affordability.

**Audit Response.** The Army comments are not responsive. Unless the Army makes the AMEV a funding priority and fully funds the AMEV for procurement in the Future Year Defense Program, it should discontinue further research, development, test and evaluation funding for the AMEV. Therefore, we request that the Assistant Secretary of the Army (Financial Management and Comptroller) comment on this recommendation to ensure that the Army spends its limited funds on programs that meet its funding priorities for full funding and procurement.

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## Appendix A. Audit Process

### Scope and Methodology

We conducted the audit from June through September 2000 and reviewed documentation dated from December 1995 to August 2000. We interviewed and obtained documentation from the staffs of the Army Training and Doctrine Command, the Assistant Secretary of the Army (Acquisition, Logistics and Technology), the Army Deputy Chief of Staff for Operations and Plans, the Army Medical Center and School, the Army Test and Evaluation Command, the Army Medical Materiel Development Activity, the Bradley Fighting Vehicle Systems Project Office, and the M113 Family of Vehicles Product Office. Because the AMEV Program was in the late phase of engineering and manufacturing development, the audit concentrated on whether management was cost-effectively readying the system for the production phase of the acquisition process. Consequently, we focused our review on the areas of requirements generation, acquisition planning, program assessments and decision reviews, and test and evaluation.

**Auditing Standards.** We conducted this program audit in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD, and accordingly included such tests of management controls as we deemed necessary.

**Use of Computer-Processed Data.** We did not rely on computer-processed data to perform this audit.

**Contacts During the Audit.** We visited or contacted individuals and organizations within the DoD. Further details are available on request.

**DoD-Wide Corporate-Level Government Performance and Results Act Coverage.** In response to the Government Performance and Results Act, the Secretary of Defense annually establishes DoD-wide corporate level goals, subordinate performance goals, and performance measures. This report pertains to achievement of the following corporate level goal and subordinate performance goal.

- **FY 2001 DoD Corporate-Level Goal 2:** Prepare now for an uncertain future by pursuing a focused modernization effort that maintains U.S. qualitative superiority in key warfighting capabilities. Transform the force by exploiting the Revolution in Military Affairs, and reengineer the Department to achieve a 21st century infrastructure. (01-DoD-2)
- **FY 2001 Subordinate Performance Goal 2.4:** Meet combat forces' needs smarter and faster, with products and services that work better and cost less, by improving the efficiency of DoD's acquisition processes. (01-DoD-2.4)

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**General Accounting Office High-Risk Area.** The General Accounting Office has identified several high-risk areas in the DoD. This report provides coverage of the Defense Weapons Systems Acquisition high-risk area.

## **Management Control Program Review**

DoD Directive 5010.38, "Management Control (MC) Program," August 26, 1996, and DoD Instruction 5010.40, "Management Control (MC) Program Procedures," August 28, 1996, require DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

**Scope of the Review of the Management Control Program.** In accordance with DoD Regulation 5000.2-R, acquisition managers are to use program cost, schedule, and performance parameters as control objectives to implement the requirements of DoD Directive 5010.38. Accordingly, we limited our review to management controls directly related to requirements generation, acquisition planning, program assessments and decision reviews, and test and evaluation. Because we did not identify a material weakness, we did not assess management's self-evaluation of those controls.

**Adequacy of Management Controls.** Management controls were adequate in that we did not identify any material management control weakness.

## **Prior Coverage**

During the last 5 years, no reports have been issued related to the Armored Medical Evacuation Vehicle.



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## Appendix B. Definitions of Technical Terms

**Acquisition Category III.** Acquisition Category (ACAT) III programs are defined as those acquisition programs that do not meet the research, development, test and evaluation and procurement dollar thresholds for an ACAT I, major Defense acquisition program; an ACAT IA, major automated information system; or an ACAT II, major system. The milestone decision authority is designated by the Component Acquisition Executive and shall be the lowest appropriate level.

**Acquisition Strategy.** An acquisition strategy is a business and technical management approach designed to achieve program objectives within the resource constraints imposed. It is the framework for planning, directing, contracting for, and managing a program. It provides a master schedule for research, development, test, production, fielding, modification, postproduction management, and other activities essential for program success. The acquisition strategy is the basis for formulating functional plans and strategies.

**Budget Estimate Submission.** The budget estimate submission is the DoD Component's budget submissions to the Office of the Secretary of Defense showing budget requirements for inclusion in the DoD budget.

**Combat Developer.** The combat developer is a command or agency that formulates doctrine, concepts, organization, materiel requirements, and objectives. The term can be used generically to represent the user community in the acquisition process.

**Engineering and Manufacturing Development.** The objective of the engineering and manufacturing development phase in the acquisition process is to translate the most promising design approach into a stable, interoperable, producible, and cost-effective design; validate the manufacturing process; and demonstrate system capabilities through testing. The intended output of the phase is, as a minimum, a preproduction system which closely approximates the final product, the documentation necessary to enter the production phase, and the test results that demonstrate that the production product will meet stated requirements.

**Force Development Experiment.** A force development experiment determines what system design changes would be needed to meet operational system needs.

**Full Funding.** Full funding is a DoD policy that applies to procurement and military construction appropriation accounts, and is defined in the DoD Financial Management Regulation. Full funding incorporates two related, but different policies. The first states that a DoD Component must identify and set aside sufficient funds in its Future Years Defense Program to cover the Component's best estimate of the annual cost for the program in each fiscal year of the Future Years Defense Program and must keep the estimate current. The second states that the DoD Component must provide sufficient funding in the annual appropriation of funds for the total estimated costs to be incurred in the delivery of a given quantity of a usable end item.

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**Full-Rate Production.** Full-rate production is contracting for economic production quantities following stabilization of the system design and validation of the production process.

**Future Years Defense Program.** The Future Years Defense Program is the official DoD document that summarizes forces and resources associated with programs approved by the Secretary of Defense. Its three parts are the organizations affected, appropriations accounts, and the 11 major force programs.

**Initial Operational Test and Evaluation.** Initial operational test and evaluation is testing conducted on production, or production representative articles, to determine whether systems are operationally effective and suitable for intended use by representative users to support the decision to proceed beyond low-rate initial production.

**Integrated Product Team.** An integrated product team is a team composed of representatives from all appropriate functional disciplines working together to build successful programs, identify and resolve issues, and make sound and timely recommendations to facilitate decision making.

**Life-Cycle Cost.** The life-cycle cost is the total cost to the government of acquisition and ownership of a system over its useful life. It includes the cost of development, acquisition, operations, and support (to include manpower), and, where applicable, disposal.

**Limited User Test.** A limited user test is any type of research, development, test and evaluation funded operational test conducted between the engineering and manufacturing design, and full-rate production phases other than the initial operational test. The limited user test normally addresses a limited number of operational issues.

**Logistics Demonstration.** A logistics demonstration is a demonstration that evaluates the achievement of maintainability goals; the adequacy and sustainability of tool, test equipment, selected test programs sets, built-in test equipment, associated support items of equipment, technical publications, maintenance instructions, trouble-shooting procedures, and personnel skill requirements; the selection and allocation of spare parts, tools, test equipment, and tasks to appropriate maintenance levels; and the adequacy of maintenance time standards.

**Low-Rate Initial Production.** Low-rate initial production is the minimum number of systems to provide production representative articles for operational test and evaluation, to establish an initial production base, and to permit an orderly increase in the production rate sufficient to lead to full-rate production upon successful completion of operational testing.

**Materiel Developer.** A materiel developer is a command or agency responsible for research and development and production validation of an item.

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**Milestone Decision Authority.** The milestone decision authority is the individual designated in accordance with criteria established by the Under Secretary of Defense for Acquisition, Technology, and Logistics to approve entry of a program into the next phase.

**Operational Test Readiness Review.** An operational test readiness review is a review to identify problems that may impact the conduct of an operational test and evaluation. Operational test readiness reviews are conducted to determine changes required in planning, resourcing, or testing necessary to proceed with the operational test and evaluation. Participants include the operational tester, evaluator, materiel developer, user representative, logisticians, Army staff, and others, as necessary.

**Planning, Programming, and Budgeting System.** The Planning, Programming, and Budgeting System is a formal, systematic structure for making decisions on policy, strategy, and the development of forces and capabilities to accomplish anticipated missions and a major decisionmaking support system for Defense acquisition. The System is a cyclic process containing three distinct, but interrelated phases: planning, which produces Defense Planning Guidance; programming, which produces approved Program Objectives Memorandum for the Military Departments and Defense Agencies; and budgeting, which produces the DoD portion of the President's national budget.

**President's Budget.** The President's budget is the Federal Government budget for a particular fiscal year transmitted on the first Monday in February to the Congress by the President in accordance with the Budget Enforcement Act of 1992. It includes all agencies and activities of the executive, legislative, and judicial branches.

**Production Qualification Test.** A production qualification test is a technical test completed before the full-rate production decision to ensure the effectiveness of the manufacturing process, equipment, and procedures. This testing also serves the purpose of providing data for the independent evaluation required for materiel release so that the evaluator can address the adequacy of the materiel with respect to the stated requirements.

**Production Verification Test.** A production verification test is a system-level developmental test conducted after the full-rate production decision to verify that the production item meets critical technical parameters and contract specifications, to determine the adequacy and timeliness of any corrective actions indicated by previous test, and to validate the manufacturer's facilities and procedures.

**Program Definition and Risk Reduction.** The program definition and risk reduction phase of the acquisition process consists of steps necessary to verify preliminary design and engineering, build prototypes, accomplish necessary planning, and fully analyze trade-off proposals. The objective is to validate the choice of alternatives and to provide the basis for determining whether to proceed into engineering and manufacturing development.

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**Program Objectives Memorandum.** The Program Objectives Memorandum is an annual memorandum submitted to the Secretary of Defense by the DoD component heads that recommends the total resource requirements and programs within the parameters of the Secretary of Defense's fiscal guidance. It is the principal programming document that details how a DoD component proposes to respond to assignments in the defense planning guidance and satisfy its assigned functions in the Future Years Defense Program. The Program Objectives Memorandum shows programmed needs for 5 or 6 years hence, and includes manpower, force levels, procurement, facilities, and research and development.

**Research, Development, Test and Evaluation.** Research, development, test and evaluation are activities for the development of a new system that include basic and applied research, advanced technology development, demonstration and validation, engineering development, developmental and operational testing and the evaluation of test results.

**Technical Data Package.** A technical data package is a technical description of an item adequate for supporting and acquisition strategy, production, engineering, and logistics support. The description defines the required design configuration and procedures to ensure adequacy of item performance. It consists of all applicable technical data such as drawings, associated lists, specifications, standards, performance requirements, quality assurance provisions, and packaging details.

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## Appendix C. Audit Responses to Army Comments Concerning the Report

Our detailed responses to the comments from the Acting Commander, Army Medical Materiel Development Activity, responding for the Commander, Army Medical Research and Materiel Command, on statements in the finding of the draft report follows. The complete text of those comments is in the Management Comments section of this report.

**Management Comments.** The Acting Commander, Army Medical Materiel Development Activity, provided comments that specifically addressed the audit objectives; the acquisition strategy and the milestone decision; the obligation of research, development, test and evaluation (RDT&E) funds; the term "funds put to better use;" the use of the phrase "Development Activity;" the low-rate initial production decision; the design deficiencies; the cost estimate for the initial operational test and evaluation; the approval for the AMEV to enter into the engineering and manufacturing development phase without procurement funding; and the reconsideration of AMEV affordability. The following discusses those specific comments and the audit response.

**Audit Objectives.** The Acting Commander stated that the primary audit objective was to evaluate the overall management of the AMEV by determining whether management was cost effective in readying the system for the production phase of the acquisition process. Further, he stated that, because the draft report did not define the term "cost effective" and did not compare AMEV expenditures with other similar programs, he can only assume that the report explains the term "cost effective" in Appendix A, Scope and Methodology. He stated that the Scope and Methodology Section of the draft report identifies eight organizations contacted from June through September 2000 with focus on the areas of requirements generation, acquisition planning, program assessments and decision reviews, and test and evaluation. Consequently, he was curious as to how the audit addressed the stated objective. He was unable to locate any findings regarding the areas of requirements generation, program assessments, or test and evaluation. Therefore, he concluded that, because the report did not address any deficiencies in these areas, the Army managed those areas cost effectively and should be noted in the report.

**Audit Response.** Even though we do not define the term "cost effective" in the report, the term means that tangible benefits are being produced by money spent. Because the Army has no intention of providing procurement funding for the AMEV, the Army Medical Materiel Development Activity is unnecessarily using funds on developing a system that the Army is not going to procure. Therefore, the Army is not cost effectively managing the AMEV because it will not procure a tangible item from the RDT&E funds spent. Concerning the areas of requirements generation, program assessments and decision reviews, and test and evaluation, we reviewed those areas to determine whether Army management was cost effectively readying the system for production. Those were the functional areas that we reviewed to accomplish the audit objective. To state whether those areas have deficiencies is not germane

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in determining whether management is cost effectively readying the AMEV for the production phase of the acquisition process because the Army has no intention of providing procurement funding for the AMEV.

**Acquisition Strategy and Milestone Decision.** The Acting Commander stated that he took exception with the finding and stated that the fact that the AMEV is unfunded for procurement has no bearing on the validity of the acquisition strategy or the appropriateness of the decision by the milestone decision authority to allow the AMEV to enter into the engineering and manufacturing development phase. He believed that the following statements in the draft report were misleading:

- the Army does not have a viable acquisition strategy to acquire the AMEV at the completion of the engineering and manufacturing development phase, and
- the Army does not intend to fund for production of the AMEV.

**Viable Acquisition Strategy.** The Acting Commander stated that the Project Office, Bradley Fighting Vehicle Systems, and the Army Medical Materiel Development Activity jointly developed the AMEV acquisition strategy and briefed the milestone decision authority and the Program Executive Office, Ground Combat and Support Systems, during the combined AMEV program definition and risk reduction, and engineering and manufacturing development decision review. Further, he stated that, as noted in the draft report, the milestone decision authority expressed reservations about the lack of procurement funding, but accepted the risk and approved the acquisition strategy as the roadmap to acquire production funding. He stated the efforts outlined in the acquisition strategy and the August 2, 1999, briefing to obtain procurement funding for the AMEV continue. In addition, he stated that the conclusion in the draft report that the Army is unwilling to fund the AMEV is premature and that the acquisition strategy is still valid and that efforts to obtain Army funding continues.

**Audit Response.** The acquisition strategy is not the roadmap to acquire program funding. As discussed in DoD Regulation 5000.2-R, the acquisition strategy is the roadmap for program execution from program initiation through post-production support and includes the critical events that govern the management of the program. The primary goal of the acquisition strategy is to minimize the time and cost of satisfying an identified, validated need consistent with common sense and sound business practices. The process for acquiring program funding is the planning, programming, and budget system. Under that system, the Project Office, Bradley Fighting Vehicle Systems, and the Army Medical Materiel Development Activity should have requested procurement funding in the Army's Program Objectives Memorandum before the program definition and risk reduction and engineering and manufacturing development decision review milestone decision on May 11, 1999. However, as noted in the report, the Project Office and the Army Medical Materiel Development Activity, did not want to request procurement funding for the AMEV because they believed that such a request would compete with their request for procurement funding for the Armored Medical Treatment Vehicle. Subsequently, in September 1999, the Program Executive Officer,

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Ground Combat and Support Systems, submitted an unfunded requirement for procurement funding of the AMEV in the FYs 2002 through 2007 Program Objectives Memorandum to the Army's Deputy Chief of Staff for Operations and Plans, who indicated no intention of funding the AMEV.

**Milestone Decision.** The Acting Commander stated that, as cited in the draft report, DoD Regulation 5000.2-R requires that the milestone decision authority not approve an acquisition program to proceed beyond program initiation unless sufficient resources, including manpower, are programmed in the most recently approved Future Years Defense Program, or will be programmed in the next Program Objectives Memorandum, Budget Estimate Submission, or President's Budget. Further, he stated that the combined AMEV program definition and risk reduction, and engineering and manufacturing development decision review occurred on May 11, 1999, and that the Army submitted an unfunded requirement for programming in the next Program Objectives Memorandum cycle, which began in September 1999. Therefore, he believed that the milestone decision authority acted in accordance with DoD Regulation 5000.2-R when he approved entry of the AMEV into the engineering and manufacturing development phase of the acquisition process. Consequently, he requested that we remove all language implying that the milestone decision authority "was negligent in approving this decision."

**Audit Response.** The milestone decision authority did not act in accordance with DoD Regulation 5000.2-R when he approved entry of the AMEV into the engineering and manufacturing development phase of the acquisition process. At the time of the milestone decision review in May 1999, the Army had neither provided procurement funding for the AMEV in the most recently approved Future Years Defense Program nor made a commitment to program procurement funding for the AMEV in the next Program Objectives Memorandum. Further, the Army could not have made a commitment to program procurement funding for the AMEV because the Program Executive Officer, Ground Combat and Support Systems, had not submitted a request for procurement funding for the AMEV until September 1999 for the FYs 2002 through 2007 Program Objectives Memorandum.

**Obligation of Research, Development, Test and Evaluation Funds.** The Acting Commander stated that the Army has obligated \$9.3 million in RDT&E funds as of September 30, 2000, instead of the \$9.7 million stated in the draft report. He also stated that the draft report implies that the Army obligated these funds during the engineering and manufacturing development phase and, therefore, inappropriately managed the funds. Further, he stated that the Army obligated about \$4.9 million of the \$9.3 million during the program definition and risk reduction phase and, therefore, the Army did not mismanage the funds.

**Audit Response.** Based on documents that the Army Medical Materiel Development Activity provided during the audit, the \$9.7 million of obligated RDT&E funds discussed in the report represent the amount of RDT&E funds that the Army obligated from inception of the AMEV in FY 1997 through FY 2000. Consequently, we revised the report to state that the Army had obligated about \$9.7 million in RDT&E funds for the program from its inception in FY 1997 through FY 2000. Concerning the comment about

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mismanagement of funds, the Army should have not approved entering the engineering and manufacturing phase of the acquisition process without having AMEV procurement funds programmed in the most recently approved Future Years Defense Program, or a commitment that those funds would be programmed in the next Program Objectives Memorandum, Budget Estimate Submission, or President's Budget.

**Term "Funds Put to Better Use."** The Acting Commander stated that the term "funds put to better use," used throughout the report, was accusatory and offensive and presumed that the Army did not properly manage AMEV funding and did not have a valid requirement for the AMEV. Further, he stated that the Army Medical Department, Center and School, the combat developer, highly ranked the requirement for the AMEV. He would like the report to be revised to state that "In the opinion of the DoDIG, these funds could be reprogrammed for other products."

**Audit Response.** The report does imply that the Army did not properly manage AMEV funding because it approved entering the engineering and manufacturing phase of the acquisition process without having a commitment for AMEV procurement funds and continued to obligate RDT&E funds without receiving procurement funds. However, the report did not state or imply that the Army Medical Department, Center and School, requirement for the AMEV was not valid. The report stated that the Army has an unfunded requirement for AMEV procurement funds; however, it has no intention of providing procurement funds for the AMEV because it has higher priority programs to fund. Concerning the reprogramming of funds, the Army's only prudent course of action would be to discontinue the AMEV development and reprogram any remaining RDT&E funds because the Army has not shown any intent to provide procurement funding for the AMEV.

**Use of Phrase "Development Activity."** The Acting Commander stated that the draft report referred to the Army Medical Materiel Development Activity as the "Development Activity." Instead, he would like the report to use the organization's official acronym, "USAMMDA."

**Audit Response.** We revised the report to state the Army Medical Materiel Development Activity in place of the "Development Activity."

**Low-Rate Initial Production Decision.** The Acting Commander stated that the Commanding General, Army Medical Research and Materiel Command, is the milestone decision authority for the AMEV up to the low-rate initial production decision and that the Program Executive Officer, Ground Combat and Support Systems, becomes the milestone decision authority at the low-rate initial production decision and retains this responsibility for the remainder of the program.

**Audit Response.** We revised the report to state that the Commander, Army Medical Research and Materiel Command, is the milestone decision authority for the AMEV, except for the low-rate initial production and the full-rate production decisions. The Program Executive Officer, Ground Combat and Support Systems, is the milestone decision authority for the low-rate initial



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production and the full-rate production decisions and is responsible for budgeting the procurement funding for the AMEV.

**Design Deficiencies.** The Acting Commander stated that the design deficiencies paragraph of the draft report should have stated that the Army Medical Department Board, not an AMEV integrated product team conducted the operational test readiness review and the limited user test/force development experiment in June 2000. Further, he stated that the Army has identified solutions for the deficiencies noted during the experiment and has begun to incorporate those solutions into the AMEV technical data package. He also stated that the Army Medical Department, Center and School, which is the combat developer, developed and approved a stowage plan during the September 28, 2000, Stowage Demonstration, where the Army determined that the stowage issues identified during the experiment were overstated. Additionally, he stated that, for the issue concerning the loading of top-litter patients, the Army Center for Health Promotion and Preventive Medicine has approved a solution, which the Army Research Laboratory, Human Resources Engineering Directorate, has begun to implement. Finally, he stated that the Army has corrected the air conditioner design problems and will complete the unit by December 2000.

**Audit Response.** We revised the report to state that:

- the Army Medical Department Board and not an AMEV integrated product team conducted the operational test readiness review and the force development experiment, and
- the Army Medical Materiel Development Activity stated that the Army has identified solutions for the deficiencies noted during the experiment and has begun to incorporate those solutions into the AMEV technical data package.

**Cost Estimate for the Initial Operational Test and Evaluation.** The Acting Commander stated that the cost estimate for the initial operation test and evaluation that the AMEV Integrated Product Team provided to the milestone decision authority on August 2, 1999, was approximately \$1 million, which is an unvalidated estimate. He requested that his comments about the unvalidated estimate be addressed in the body of the report and not as a footnote.

**Audit Response.** We revised the report to state that, on August 2, 1999, the AMEV Integrated Product Team briefed the milestone decision authority that an IOT&E, if required, would cost about \$1 million. However, according to the Army Medical Materiel Development Activity, the Army did not validate this estimate.

**Approval for the AMEV to Enter into the Engineering and Manufacturing Development Phase Without Procurement Funding.** The Acting Commander concurs with the finding that the Army has not funded the AMEV for production; however, he nonconcurs with the implication that the milestone decision authority was negligent in his decision to allow the program to enter the engineering and manufacturing development phase. He stated that, because the Army Medical Command does not have procurement funds to

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purchase vehicles for its mission, it must rely on the Army to provide the platforms with which it can perform its mission. Further, he stated that the mission needs statement and operational requirements document, which the Army Training and Doctrine Command approved, state that the current ground evacuation platform, the M113A2/A3 is unable to maintain pace with the supported force and is unable to provide the required medical support when and where the it is most desperately needed. He also stated that the AMEV provides a cost-effective solution to the M113A2/A3 by recapitalizing existing Army assets and by reducing logistical burdens.

**Audit Response.** The milestone decision authority should not have allowed the AMEV to enter the engineering and manufacturing phase of the acquisition process without having a commitment for AMEV procurement funds, as previously discussed. Even though the mission needs statement and operational requirements document indicate a need for the AMEV, the Army has no intention of providing procurement funds for the AMEV because it has higher priority programs to fund.

**Reconsidering AMEV Affordability.** The Acting Commander stated that the Army is reconsidering whether the AMEV is affordable in response to the changing scope and mission of projected future operations by conducting a cost analysis of current and future program affordability.

**Audit Response.** The point of contact for the Acting Commander's comments informed us that the Army Medical Materiel Development Activity was conducting the cost analysis of current and future AMEV affordability. Such efforts are unproductive given that Army management has no intention of providing procurement funds for the AMEV because of higher priority programs to fund.

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## **Appendix D. Report Distribution**

### **Office of the Secretary of Defense**

Under Secretary of Defense for Acquisition, Technology, and Logistics  
Under Secretary of Defense (Comptroller/Chief Financial Officer)  
Deputy Comptroller (Program/Budget)

### **Department of the Army**

Commander, Army Materiel Command  
Commander, Tank-automotive and Armaments Command  
Deputy for Systems Acquisition  
Project Manager, Combat Mobility Systems  
Product Manager, M113 Family of Vehicles  
Commander, Army Training and Doctrine Command  
Assistant Secretary of the Army (Acquisition, Logistics, and Technology)  
Program Executive Officer, Ground Combat and Support Systems  
Project Manager, Bradley Fighting Vehicle Systems  
Assistant Secretary of the Army (Financial Management and Comptroller)  
Commander, Army Medical Command  
Commander, Army Medical Center and School  
Commander, Army Medical Research and Materiel Command  
Director, Army Medical Materiel Development Activity  
Deputy Chief of Staff for Operations and Plans  
Auditor General, Department of the Army  
Commander, Army Test and Evaluation Command

### **Department of the Navy**

Naval Inspector General  
Auditor General, Department of the Navy

### **Department of the Air Force**

Assistant Secretary of the Air Force (Financial Management and Comptroller)  
Auditor General, Department of the Air Force

### **Other Defense Organization**

Director, Defense Contract Management Agency

### **Non-Defense Federal Organization**

Office of Management and Budget

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## **Congressional Committees and Subcommittees, Chairman and Ranking Minority Member**

Senate Committee on Appropriations  
Senate Subcommittee on Defense, Committee on Appropriations  
Senate Committee on Armed Services  
Senate Committee on Governmental Affairs  
House Committee on Appropriations  
House Subcommittee on Defense, Committee on Appropriations  
House Committee on Armed Services  
House Committee on Government Reform  
House Subcommittee on Government Management, Information, and Technology,  
Committee on Government Reform  
House Subcommittee on National Security, Veterans Affairs, and International  
Relations, Committee on Government Reform

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## Program Executive Office, Ground Combat and Support Systems, Comments



REPLY TO  
ATTENTION OF  
SFAE-GCSS-W-P

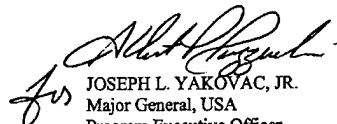
DEPARTMENT OF THE ARMY  
PROGRAM EXECUTIVE OFFICE  
GROUND COMBAT AND SUPPORT SYSTEMS  
WARREN, MI 48397-5000

OCT 9 0 2000

MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE,  
ACQUISITION MANAGEMENT DIRECTORATE,  
400 ARMY NAVY DRIVE, ARLINGTON, VA 22202-2885

SUBJECT: Acquisition of the Armored Medical Evacuation Vehicle

The proposed audit report entitled (draft) ACQUISITION OF THE ARMORED MEDICAL EVACUATION VEHICLE provides an accurate assessment of the documentation provided by PM Bradley.

*for*   
JOSEPH L. YAKOVAC, JR.  
Major General, USA  
Program Executive Officer,  
Ground Combat and Support Systems

# Army Medical Materiel Development Activity Comments



REPLY TO  
ATTENTION OF:

DEPARTMENT OF THE ARMY  
U.S. ARMY MEDICAL MATERIEL DEVELOPMENT ACTIVITY  
622 NEWMAN STREET  
FORT DETRICK, MARYLAND 21702-5009

MCMR-UMA (70-1y)

24 October 2000

MEMORANDUM THRU Commanding General, U.S. Army Medical Research and Materiel Command,  
ATTN: MCMR-ZX, 504 Scott Street, Fort Detrick, MD 21702-5012

FOR Inspector General, Department of Defense, ATTN: DODIG (Mr. Davis), 400 Army Navy Drive,  
Arlington, VA 22202-2884

SUBJECT: Comments to the Draft Proposed Audit Report for Project Number D2000AE-0208,  
Acquisition of the Armored Medical Evacuation Vehicle

1. While I appreciate the thoroughness and professionalism with which the Department of Defense Inspector General (DOD IG) audit of the Armored Medical Evacuation Vehicle (AMEV) was conducted, I must clarify and refute some of the information contained in the draft audit report.

2. The areas of specific concern are discussed below.

a. As stated in the Audit Objectives paragraphs throughout the report, the primary audit objective was to, "evaluate the overall management of the AMEV," which was further defined as, "whether management was cost effective in readying the system for the production phase of the acquisition process." Since no definition is provided, and no data on expenditures from other similar programs was included for comparison, I can only assume that the term "cost effective" is explained by Appendix A, Scope and Methodology. This section identifies eight organizations contacted from June through September 2000 with focus on the areas of "requirements generation, acquisition planning, program assessments and decision reviews, and test and evaluation." To this end, I am curious how this audit purports to address the stated objective. I am unable to locate any findings regarding the areas of requirements generation, program assessments, or test and evaluation. If there were no deficiencies noted; i.e., these areas were managed "cost effectively," please so note in the final audit report.

b. The primary finding of the draft audit report was that "the Army does not have a viable acquisition strategy to acquire the AMEV at the completion of the engineering and manufacturing development (EMD) phase of the acquisition process. This condition occurred because the milestone decision authority (MDA) allowed the AMEV to enter BMD without full funding for the production phase of the acquisition process." I take exception to this finding. While it is true that the AMEV is currently unfunded for production, this has no bearing on the validity of the acquisition strategy or the appropriateness of the MDA's decision to enter EMD.

(1) The assertions that, "the Army does not have a viable acquisition strategy to acquire the AMEV at the completion of EMD," and, "that the Army does not intend to fund for production," are misleading. The Acquisition Strategy Policy cited in the draft audit report "requires that the Program Manager develop and document an acquisition strategy." The AMEV acquisition strategy was developed jointly by the Program Management offices at Program Manager-Bradley and the U.S. Army Medical Materiel Development Activity (USAMMDA) and was briefed thoroughly to both the MDA and the

SUBJECT: Comments to the Draft Proposed Audit Report for Project Number D2000AE-0208,  
Acquisition of the Armored Medical Evacuation Vehicle

Deputy Program Executive Office - Ground Combat and Support Systems (DPEO-GCSS) during the Milestone I/II In-Process Review. As noted in the draft audit report, the MDA expressed reservations about the lack of procurement funding, but accepted the risk and approved the acquisition strategy as the roadmap to acquire production funding. To this end, efforts as outlined in the acquisition strategy and the 2 August 1999 brief to the MDA continue. The conclusion that the Army is unwilling to fund this program is premature. The acquisition strategy was and is valid and efforts to secure Army funding are ongoing.

(2) DoD Regulation 5000.2-R as cited in the draft audit report requires that, "the MDA not approve an acquisition program to proceed beyond program initiation unless sufficient resources, including manpower, are programmed in the most recently approved Future Years Defense Program, or will be programmed in the next Program Objective Memorandum (POM), Budget Estimate Submission, or President's Budget." The AMEV Milestone I/II decision occurred on 11 May 1999 and an unfunded requirement was submitted for programming in September 1999 (the next POM). Therefore, under the authority of DoD Regulation 5000.2 (cited above), the MDA acted appropriately in approving the entry into EMD. Accordingly, please remove all language implying that the MDA was negligent in approving this decision.

c. The Army has obligated about \$9.3M in research, development, test, and evaluation funds as of 30 September 2000 as opposed to the \$9.7M cited in the Draft audit report. Additionally, the wording of the draft audit report insinuates that this money was obligated during the EMD phase and therefore, inappropriately managed. This is not correct. Approximately \$4.9M of this amount was obligated during the Program Definition and Risk Reduction phase and is therefore not subject to the DOD IG insinuation of mismanagement. Please so reflect in the final audit report.

d. The term "funds put to better use" used throughout the draft audit report is accusatory and offensive. It presumes that the Army has mismanaged this funding and that this program does not have a valid requirement. The Combat Developer has consistently ranked this requirement highly in the Mission Area Materiel Plan and has authored the Mission Needs Statement (MNS) and Operational Requirements Document (ORD). This phrase would be more accurately stated as, "In the opinion of the DOD IG, these funds could be reprogrammed for other products." This wording is much less offensive and presumptuous.

e. In the Background section of the report, USAMMDA is referred to as "the Development Activity." The official acronym is "USAMMDA." Please change the draft audit report accordingly.

f. As a clarifying point, the Commanding General, U.S. Army Medical Research and Materiel Command is the MDA for the AMEV up to the Low-Rate Initial Production Decision (LRIP). The PEO-GCSS becomes the MDA at the LRIP decision and retains this responsibility for the remainder of the program.

g. The Design Deficiencies paragraph of the draft audit report contains incorrect information. The U.S. Army Medical Department Board, not an AMEV Integrated Product Team, conducted the



SUBJECT: Comments to the Draft Proposed Audit Report for Project Number D2000AB-0208,  
Acquisition of the Armored Medical Evacuation Vehicle

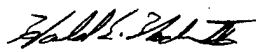
Operational Test Readiness Review and Limited User Test/Force Development Experiment (FDE) in June 2000. Additionally, the deficiencies noted during the FDE have been addressed with identified solutions, which are being incorporated into the Technical Data Package. A stowage plan was developed and approved by the Combat Developer during the 28 September 2000 Stowage Demonstration, where it was determined that the extent of the stowage issues identified during the FDE were overstated. The top-litter patient loading issue has been addressed and a materiel solution approved by the U.S. Army Center for Health Promotion and Preventive Medicine and the U.S. Army Research Laboratory, Human Resources Engineering Directorate is being implemented. And, the air conditioner design problems have been corrected and the unit will be completed by December 2000.

h. The cost estimate for the Initial Operational Test and Evaluation provided to the MDA on 2 August 1999 was approximately \$1M. Please include the fact that this figure is an unvalidated estimate in the draft audit report body, and not in a footnote.

3. I concur with the DOD IG finding that the AMEV is unfunded for production. I non-concur with the implication that the MDA was negligent in his decision to allow the program entry into the EMD phase. The Army Medical Command (MEDCOM) is the only Army Major Command that does not have procurement funds to purchase vehicles for its mission. As such, the MEDCOM relies upon the good will and support of the Army to provide the platforms with which we can perform our mission. As noted in the Training and Doctrine Command approved MNS and ORD, the M113A2/A3, the current ground evacuation platform, is unable to maintain pace with the supported force and is not capable of providing the required medical support when and where it is most desperately needed. As a result, soldiers' lives may be lost. The AMEV provides a cost-effective solution to this problem by recapitalizing existing Army assets and reducing the logistics burden by providing commonality with the supported force. We would be remiss in our duty to support the soldier if we did not pursue this initiative.

4. The Army is reconsidering AMEV program affordability in response to the changing scope and mission of projected future operations. A cost analysis of current and future program affordability is underway to assist in the determination of the future of the AMEV program.

5. Point of contact for this action is Mr. Steven W. Reichard, 301-619-7582, DSN 343-7582, E-mail Steven.Reichard@det.amedd.army.mil.



HAROLD E. MODROW, III  
Lieutenant Colonel, MS  
Acting Commander

CF:  
Commanding General, U.S. Army Medical Research and Materiel Command, ATTN: MCMR-SGS,  
504 Scott Street, Fort Detrick, MD 21702-5012  
Commanding General, U.S. Army Medical Research and Materiel Command, ATTN: MCMR-IR,  
504 Scott Street, Fort Detrick, MD 21702-5012

## **Audit Team Members**

The Acquisition Management Directorate, Office of the Assistant Inspector General for Auditing, DoD, prepared this report. Personnel of the Office of the Inspector General, DoD, who contributed to the report are listed below.

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## INTERNET DOCUMENT INFORMATION FORM

**A . Report Title:** Acquisition of the Armored Medical Evacuation Vehicle

**B. DATE Report Downloaded From the Internet:** 11/28/00

**C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #):** OAIG-AUD (ATTN: AFTS Audit Suggestions)  
Inspector General, Department of Defense  
400 Army Navy Drive (Room 801)  
Arlington, VA 22202-2884

**D. Currently Applicable Classification Level:** Unclassified

**E. Distribution Statement A:** Approved for Public Release

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